





Comp Subwoofer Owner's Manual

Models: C15 / C12 / C10 / C8

Attention:

Please record your purchase information in the area below. We recommend attaching the original sales receipt to this manual for future reference.

If you require service on this speaker during the warranty period, you will need to provide this information and a copy of the original sales receipt to Kicker for validation of warranty repairs.

ALWAYS KEEP YOUR RECEIPT!

Congratulations!

You have purchased one of the most versatile subwoofers in car audio.

The Comp was designed by the award-winning KICKER speaker design team, tested in the judging lanes of International Sound Competitions, and proven on the Street to deliver the ultimate in low bass output, durability and outrageous SPL.

This is your "fuel for Livin' Loud™"!

Authorized Kicker Dealer:	
Authorized Nickel Dealer.	
Purchase Date:	
Speaker Model Number:	
Speaker Serial Number:	
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Features

- Vacuum Formed Polymineral Cone with ISD™
 (Inverted Structural Dome) is a high performance
 composite, which remains rigid, minimizes cone flex and lowers
 harmonic distortion. The Comp's cone consists of a unique
 one-piece material that moves as a light weight piston,
 exhibiting power and control.
- Rear Cone Brace integrates into the Comp's cone with a continuous contact perimeter weld, which offers unmatched strength and resistance to deformation under pressure.
- Double Stitched Surround adds a mechanical fastener to the chemical adhesives. This duo prevents the cone and surround from separating in the harshest conditions.
- Optimized Polyfoam Ribbed Surround Radius allows extended cone excursion for additional bass output and higher SPL, and couples the suspension into a conjoined linear-motion body.
- High-Temp Polyimide Film Voice Coil Former improves sonic and conductive properties, and prevents thermal-electrical meltdown.
- Ultra-Length Voice Coil sustains enormous cone excursion and provides extra heat dissipation.

- Sleeved High-Power Tinsel Lead Wires eliminate broken leads and power loss, due to the common use of "insufficient-gauge" lead wires.
- Spring-Loaded Nickel Plated Terminals flawlessly connect medium to heavy gauge speaker wire to the high-power tinsel lead wires.
- Two-Piece Vented Hyper-Extended Blackened Pole Piece and Backplate
 - 1. Optimizes heat transfer efficiency for cooler operation and maximum power handling ability.
 - 2. Eliminates erratic magnetic flux from the voice-coil gap.
 - Releases pressure under the suspension for uniform cone movement and responsive low bass.
 - 4. Prevents the voice-coil from bottoming out and corresponding damage.
- New Enhanced BAM (Basket and Motor) Assembly
 utilizes a high strength steel basket, features a low-profile open
 design, and provides a solid foundation for the
 precision-aligned motor assembly.
- Perimeter Venting in the BAM relieves pressure from under the spider, supports a linear excursion, and helps dissipate heat from the voice coil and motor structure.

Performance				
Model:	C8	C10	C12	C15
Nominal Impedance [Zn], ohm	4 or 8	4 or 8	4 or 8	4 or 8
Resonance Frequency [fs], Hz	40.2	29.4	26.5	21.7
Sensitivity [SPLo], dB @ 1W, 1m	85.6	87.3	89.1	90.2
Effective Piston Area [Sd], in ² (m ²)	31.9 (.0206)	57.4 (.037)	82.5 (.0532)	132.7 (.0856)
Power Handling Watts, Peak (RMS)	200 (100)	300 (150)	300 (150)	500 (250)
Effective Frequency Range, Hz	30-500	30-500	27-500	25-500
Effective Excursion [EXmax™], in (mm)	.34 (8.76)	.38 (9.76)	.38 (9.76)	.45 (11.53)
DC Resistance [Re], ohm	3.98	3.70	3.69	3.32
Voice Coil Inductance [Le], mH	2.40	3.15	2.90	3.44
Voice Coil Diameter [d], in (mm)	1 3/8 (35.5)	1 5/8 (40.5)	1 5/8 (40.5)	1 13/16 (45.5)
Voice Coil Length [h], in (mm)	.85 (21.5)	.99 (25.2)	.99 (25.2)	1.22 (31.0)
Mechanical Q-Factor [Qms]	10.00	9.65	9.61	11.20
Electrical Q-Factor [Qes]	.544	.473	.447	.397
Total Q-Factor [Qts]	.516	.451	.427	.383
Force Factor [BL], Tm	9.45	11.32	12.50	15.32
Equivalent Volume [Vas], ft3 (L)	.69 (19.54)	2.27 (64.38)	4.50 (127.65)	9.61 (272.33)
Moving Mass [Mms], oz (g)	1.70 (48.33)	3.13 (88.8)	4.01 (113.57)	7.38 (209.31)
Net Displacement, in ³ (cc)	38 (620.0)	60.0 (982.3)	104.9 (1718.6)	198.7 (3256.8)
Outer Frame Diameter, in (cm)	8 1/2 (21.6)	10 11/16 (27.1)	12 1/2 (31.8)	15 7/16 (39.1)
Hole Cut-Out Diameter, in (cm)	7 1/16 (18.0)	9 1/4 (23.5)	11 1/8 (28.3)	13 7/8 (35.2)
Mounting Depth, in (cm)	4 (10.2)	4 15/16 (12.5)	5 3/4 (14.6)	7 3/8 (18.7)
Magnet Weight, oz (kg)	25 (.71)	33 (.936)	45 (1.28)	75 (2.13)

Measurements based on 4 ohm voice coil models.

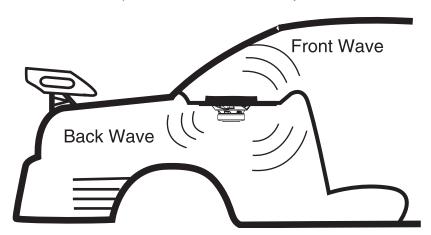
Installation

The Kicker Comp subwoofers are designed to be extremely versatile. Comp subwoofers excel in a sealed or vented box, and they surpass the competition on an infinite baffle (free-air) installation.

Infinite Baffle Mounting

The infinite baffle mounting method effectively utilizes the rear deck and trunk space of most sedan type vehicles. Mark the rear deck or parcel shelf for the hole cut-out diameter of the subwoofer and cut the holes. The rear deck may need to be reinforced to help hold the weight of the subwoofer and to keep it from flexing during playback. Mount 3/4" (1.9 cm) thick MDF (Medium Density Fiberboard) to the bottom of the deck. Mark the MDF and cut the holes. If MDF is not available in your area, use marine grade plywood.

To optimize the infinite baffle installation, prevent the trunk, or rear, sound waves (generated from the back of the subwoofer cone) from entering the passenger area of the vehicle. Gaps or holes in the trunk area may be filled with silicone.



Note: To get the best performance from your Comp subwoofer, we recommend using *genuine* Kicker Accessories and Wiring.

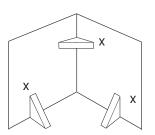
Box Building Notes

The cardboard "Template" inside your Comp's shipping carton can be used as a pattern for cutting the speaker mounting hole in your enclosure. The cardboard template is the same size as the Comp basket. After marking your baffle with the template, make sure to cut directly on the line. This will maintain the proper baffle cut-out size for the Comp basket.

All the cubic feet numbers given in the following pages include the displacement of the woofer. For the ported enclosures the displacement of the port must be added to the final design.

Always use 3/4" (1.9 cm) or thicker MDF and make sure all the joints are fastened and well sealed. The peak pressure in a ported box can exceed that of a sealed enclosure. All of these designs need some internal bracing. Add 2" x 2" (5 cm x 5 cm) to 3" x 3" (8 cm x 8 cm) triangle braces between each of the larger unsupported panels.

Kicker recommends using a high-grade wood glue and silicone sealer for an airtight box.



x = 3" x 3" for C15, C12 x = 2" x 2" for C10, C8

Note: If you prefer an ultra-smooth bass response, you should loosely fill your Comp enclosure with poly-fil (polyester fiberfill) stuffing. Ported designs will require covering the end of the port (located inside the box) with grill cloth, chicken wire, or expanded metal to prevent the poly-fil from being blown out of the port. The use of poly-fil stuffing will slightly decrease efficiency, but will deepen and extend the low frequency output.

Do not install a port opening against a solid surface, such as an internal brace, back-panel or trunk wall, seat or interior panel of your vehicle. The port opening must remain unobstructed. Use the smallest dimension of the rectangular port or the diameter of the round port as the minimum amount of space between the port opening and any solid surface to insure unrestricted airflow.

For more advice on box building, click on the <u>SUPPORT</u> tab on the Kicker homepage, *www.kicker.com*. Choose the <u>Technical Support</u> tab, choose the <u>Tech Manuals</u> tab, and then download or view the corresponding information. Please E-mail support@kicker.com or call Technical Services (405) 624-8583 for specific or unanswered questions.

A Note on Power Handling Capacity

Comp subwoofers will handle large amounts of power in any of the recommended enclosures, sealed or vented. The smaller enclosures are best for use in limited-space applications. The larger recommended enclosures will yield slightly more bass at the lowest frequencies. The infinite baffle (free-air) mounting method will handle moderate amounts of power and take up less trunk or passenger space.

Recommended Enclosures

Comp Sealed Enclosure Applications

The Kicker Comp excels when used in the recommended sealed boxes. These sealed enclosure designs will give the smoothest response with increased energy at the lowest frequencies.

20 to 30 Hz. These designs deliver massive amounts of high impact bass and can be driven with high levels of amplifier power.

The Comp high performance suspension system can operate in a larger sealed enclosure without sacrificing its power handling ability. This maximum enclosure volume application is ideal for SQ (ultra sound quality) installations. The SQ enclosure generates a very flat response curve and superbly extends sub bass.

Comp subwoofers perform well in any size sealed enclosure between the Compact and SQ volume recommendations. These systems will exhibit benefits of both designs: Compact produces high impact bass and SQ generates low bass frequency protraction. Overall, the system will sound more like the recommended enclosure design it is closest to in enclosure volume.

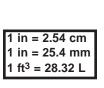
These enclosure recommendations have been calculated with the airspace inside the enclosure and include the displacement of the woofer.

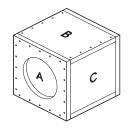
Recommended Sealed Enclosures -	- Moderate Efficiency
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Model	Compact (Minimum Enclosure Volume)	SQ (Maximum Enclosure Volume)
C8	.5 ft ³ Power Handling = 100W RMS 14.2 L	1.2 ft ³ Power Handling = 100W RMS 34.0 L
C10	1.0 ft ³ Power Handling = 150W RMS 28.3 L	2.4 ft ³ Power Handling = 150W RMS 68.0 L
C12	1.25 ft ³ Power Handling = 150W RMS 35.4 L	3.5 ft ³ Power Handling = 150W RMS 99.1 L
C15	2.25 ft ³ Power Handling = 250W RMS 63.7 L	5.0 ft ³ Power Handling = 250W RMS 141.6 L

Panel Dimensions for Minimum Recommended Sealed Enclosures using 3/4" (1.9 cm) thick MDF:

Model	Volume, ft ³ (L)	Panel A	Panel B	Panel C
C8	.5 (14.2)	11 x 11	11 x 9.5	9.5 x 9.5
C10	1.0 (28.3)	13.5 x 13.5	13.5 x 12	12 x 12
C12	1.25 (35.4)	14.5 x 14.5	14.5 x 13	13 x 13
C15	2.25 (63.7)	17.25 x 17.25	17.25 x 15.75	15.75 x 15.75





Note: All sealed box airspace should be filled to 50% loose poly-fil stuffing. Please allow two weeks of break-in time for the Comp subwoofer to reach optimum bass performance.

Comp Ported (Vented) Enclosure Applications

Ported Comps? Absolutely...and with a vengeance! These enclosures incorporate huge tube ports with high-impact air velocities for sheet metal bending street bass that will make your "skin bounce on your bones!" These boxes are the enclosure of choice for outrageous street bass and high performance SPL contests.

The ported Compact design increases bass efficiency and fits in many space-limited applications. Although it is the smallest recommended ported enclosure, the output from 30 to 80 Hz will be considerably higher than that of any sealed box. The two other ported designs have proportionately more output in this crucial frequency band.

The SPL / Deep Bass is the largest and most efficient enclosure design. The SPL / Deep Bass delivers the sonic output needed to win SPL contests and it produces bass notes "all the way down to tha cella". This design turns heads and jump starts your heart.

If space is not a problem and you want to get the most from your Comp, try one of these ported designs. You will not be disappointed.

The following page shows a chart with the three Recommended Rectangular Port Enclosure sizes for each Comp driver.

Recommended Rectangular Port Enclosures – High Efficiency		
Model	Compact	SPL / Deep Bass
C8	.66 ft ³ (18.7 L) + port displacement 1.5" x 8" port, 18" long (3.8cm x 20.3cm port, 45.7cm long) Power Handling = 55W RMS	1.2 ft ³ (34.0 L) + port displacement 1.5" x 8" port, 12.25" long (3.8cm x 20.3cm port, 31.1cm long) Power Handling = 55W RMS
C10	1.25 ft ³ (35.4 L) + port displacement 1.5" x 10.5" port, 14.5" long (3.8cm x 26.7cm x port, 36.8cm long) Power Handling = 150W RMS	1.75 ft ³ (49.6 L) + port displacement 1.5" x 10.5" port, 13.25" long (3.8cm x 26.7cm port, 33.7cm long) Power Handling = 150W RMS
C12	1.75 ft ³ (49.6 L) + port displacement 2.0" x 12.5" port, 16" long (5.1cm x 31.8cm port, 40.6cm long) Power Handling = 150W RMS	2.25 ft ³ (63.7 L) + port displacement 2.0" x 12.5" port, 16.375" long (5.1cm x 31.8cm port, 41.6cm long) Power Handling = 150W RMS
C15	3.0 ft ³ (85.0 L) + port displacement 2.75" x 15.5" port, 17" long (7.0cm x 39.4cm port, 43.2cm long) Power Handling = 250W RMS	4.0 ft ³ (113.3 L) + port displacement 3.0" x 15.5" port, 16.5" long (7.6cm x 39.4cm port, 41.9cm long) Power Handling = 250W RMS

Note: The use of a subsonic filter will significantly increase the power handling. The power handling specifications in this chart are calculated using a 25 Hz, 24 dB per octave subsonic filter. All specifications and performance figures are subject to change. Please visit **kicker.com** for the most current information.

ACOUSTICS LIMITED WARRANTY

Kicker warrants this product to be free from defects in material and workmanship under normal use for a period of THREE (3) MONTHS from date of original purchase with receipt. When purchased from an Authorized KICKER Dealer it is warranted for ONE (1) YEAR from date of original purchase with receipt. In all cases you must have the original receipt! Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction during the warranty period, Kicker will repair or replace (at its discretion) the defective merchandise with equivalent merchandise at no charge. Warranty replacements may have cosmetic scratches and blemishes. Discontinued products may be replaced with more current equivalent products.

This warranty is valid only for the **ORIGINAL PURCHASER** and is not extended to owners of the product subsequent to the original purchaser. Any applicable implied warranties are limited in duration to a period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties, therefore these exclusions may not apply to you. This warranty gives you specific legal rights; however you may have other rights that vary from state to state.

WHAT TO DO IF YOU NEED WARRANTY OR SERVICE

Defective merchandise should be returned to your local Authorized Stillwater Designs (Kicker) Dealer for warranty. Assistance in locating an Authorized Dealer can be obtained by writing, calling, or by visiting **kicker.com**. You can confirm that a dealer is authorized by asking to see a current authorized dealer window decal.

If it becomes necessary for you to return defective merchandise directly to Stillwater Designs (Kicker), call the Kicker Customer Service Department at (405) 624-8510 for a Return Authorization (RMA) number. Package all defective items in the original container or in a package that will prevent shipping damage, and return to:

Stillwater Designs, 5021 North Perkins Road, Stillwater, OK 74075

The RMA number must be clearly marked on the outside of the package. Please return **only defective components** (subwoofer, speaker-wire connector, etc.). The return of functioning items increases your return freight charges. Non-defective items received will be returned freight collect.

Include a copy of the original receipt with the purchase date clearly visible, and a "proof-of-purchase" statement listing the Customer's name, Dealer's name and invoice number, and product purchased. Warranty expiration on items without proof-of-purchase will be determined from type of sale and the manufacturing date code. Freight must be prepaid: items sent freight collect, or COD, will be refused.

Failure to follow these steps may void your warranty. Any questions can be directed to the Kicker Customer Service Department at (405) 624-8510.

WHAT IS NOT COVERED?

This warranty is valid only if the product is used for the purpose for which it was designed.

It does not cover:

- · Damage due to improper installation.
- Subsequent damage to other components.
- Damage caused by exposure to moisture, excessive heat, chemical cleaners, and/or UV radiation.
- Damage through negligence, misuse, accident or abuse. Repeated returns for the same damage may be considered abuse.
- Any cost or expense related to the removal or reinstallation of product.
- Speakers damaged due to amplifier clipping or distortion.
- Items previously repaired or modified by any unauthorized repair facility.
- · Return shipping on non-defective items.
- · Products with tampered or missing bar code labels.
- · Products returned without a Return Authorization (RMA) number.
- · Freight Damage.
- The cost of shipping product to Kicker.
- · Service performed by anyone other than Kicker.

HOW LONG WILL IT TAKE?

Kicker strives to maintain a goal of 24-hour service for all acoustics (subwoofers, midrange drivers, tweeters, crossovers, etc) returns. Delays may be incurred if lack of replacement inventory or parts is encountered.

INTERNATIONAL WARRANTY

Contact your International Kicker dealer or distributor concerning specific procedures for your country's warranty and service policies.





P.O. Box 459 • Stillwater, Oklahoma 74076 • U.S.A. • 405 624-8510



KICKER drivers are capable of producing sound levels that can permanently damage your hearing! Turning up a system to a level that has audible distortion is more damaging to your ears than listening to an undistorted system at the same volume level. The threshold of pain is always an indicator that the sound level is too loud and may permanently damage your hearing.

Please use common sense when controlling volume!

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